

Docket No. F-8543

Ser. No. 10/525,613

Claims 1, 6 and 20 are amended herein to clarify the invention and to address matters of form unrelated to substantive patentability issues.

Applicants herein traverse and respectfully request reconsideration of the rejection of the claims cited in the above-referenced Office Action.

Claims 1 and 2 are rejected under 35 U.S.C. § 102(b) as being anticipated by Schmitt et al. (US 6,021,969). Claim 1 is further rejected under 35 U.S.C. § 102(b) as being anticipated by either Geiger (US 4,174,074) or Tsuji (US 5,853,132). Applicant herein respectfully traverses these rejections. "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*" ***Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.***, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). It is respectfully submitted that the cited reference is deficient with regard to the following.

Independent claim 1 is amended to include the subject matter formerly recited in claim 5, the latter claim which is cancelled herein. The subject matter of claim 5 specifies the provision of a generally disk shaped rotor, wherein a grinding material input opening and a grinding material output opening are arranged respectively in a radially outward and radially inner axial area of the grinding chamber.

Clearly claim 1, in this amended form, is not anticipated by any of the cited Schmitt et al., Geiger or Tsuji references, as none of the individual reference teach a rotor essentially shaped as a disk.

Docket No. F-8543

Ser. No. 10/525,613

Claim 1 is rejected as obvious over Stein et al. (US 5,590,841) in view of Geiger under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection. For a rejection under 35 U.S.C. §103(a) to be sustained, the differences between the features of the combined references and the present invention must be obvious to one skilled in the art.

As amended in the manner discussed above, claim 1 now recites an essentially disk shaped rotor with a grinding material input opening being arranged in a radially outer peripheral area of the grinding chamber, and a grinding material output opening being arranged in a radially inner area of the grinding chamber. Such provision is absent from each of the cited references.

Thus, it is respectfully submitted that rejected claim 1 is not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejection of the claim 1 and its allowance are respectfully requested.

Claims 2, 5 and 6 are rejected as obvious over Stein et al. (US 5,590,841) in view of Geiger, and further in view of the Stehr et al. (US 5,624,080) under 35 U.S.C. §103(a).

Claim 2 is cancelled rendering the rejection as pertaining thereto moot. The subject matter of claim 5 has been incorporated into amended claim 1, and thus, while claim 5 is cancelled herein, technically rendering its rejection moot as well, the applicants herein respectfully traverse this rejection, which will be argued as now pertaining to claim 1, and claim 6 now depending in turn therefrom.

Docket No. F-8543

Ser. No. 10/525,613

Applicants respectfully submit that the subject matter formerly of claim 5 recites a rotor being essentially disk-shaped, and a grinding material input opening being arranged in a radially outer peripheral area and the grinding material output opening being arranged in a radially inner axial area, thus allowing the entire process space both in the peripheral area itself and between the peripheral area and the axial area, advantageously on both sides of the disk, to be used for wet grinding. In addition, in accordance with the claim language, pins are arranged over the entire respective surfaces of the stator and the rotor.

Thus, the available process space is used very efficiently. As a result, the agitating ball mill of the present invention claimed in claim 1 as amended enables high treatment/grinding power densities (mechanical energy input per unit process volume and per unit time) as well as compact and simple mill design.

It is applicants' position that none of the agitator mill geometries of Stein et al., Geiger or Stehr result in, or suggest, a flow of grinding material (e.g. via pumping action) from a radially outer peripheral area towards a radially inner axial area, i.e. inward flow pattern, particularly on both sides of a generally disk-shaped rotor.

Thus, it is respectfully submitted that rejected claim 1 and claim 6 dependent therefrom are not obvious in view of the cited references for the reasons stated above. Reconsideration of the rejection of claims 1 and 6 and their allowance are respectfully requested.

Docket No. F-8543

Ser. No. 10/525,613

Claims 3 and 4 are rejected as obvious over Stein et al. (US 5,590,841) in view of Geiger, and further in view of the cited Japanese Patent under 35 U.S.C. §103(a). The cancellation of claims 3 and 4 renders these rejections moot.

Claims 7-13, 15, 16, 20 and 21 are rejected as obvious over Stein et al. in view of Geiger, and further in view of the British patent under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection.

Regarding claims 7-13, 15 and 16, these claims depend from amended claim 1, discussed above, and patentability thereof is derived at least in part from the subject matter of claim 1, as well as for the additional recitations they contain, insofar as the British reference, cited for its teachings alleged to relate to a ball mill that can be swivelled, fails to provide the claimed features demonstrated by applicants to be lacking in the Stein et al. and Geiger references.

Thus, it is respectfully submitted that rejected claims 7-13, 15 and 16 are not obvious in view of the cited references for the reasons stated above.

Regarding claim 20, the claim is amended to specify that a separation device includes a screen jacket within which a self-cleaning grading screen is concentrically arranged, and further that screen cleaning pins are arranged on the rotor such that the pins extend into an annular gap defined between the grading screen and the screen jacket. No such structural feature is taught or suggested by any of the cited references.

Docket No. F-8543

Ser. No. 10/525,613

With regard to claim 21, none of the references teach the use of a paddle wheel as part of a separation device, and the rejection appears to be silent regarding such provision. Moreover, the claim is amended to further recite that a grinding material input opening is arranged in a radially outer peripheral area of the grinding chamber, and that a grinding material output opening is arranged in a radially inner area of the grinding chamber, a feature lacking in all cited references.

Based upon the foregoing, reconsideration of the rejection of claims 7-13, 15, 16, 20 and 21 and their allowance are respectfully requested.

Claim 14 is rejected as obvious over Stein et al. in view of Geiger and the British patent, and further in view of Bishop et al., under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection.

Claim 14 depends from amended claim 1, discussed above, and patentability thereof is derived at least in part from the subject matter of claim 1, as well as for the additional recitations it contains, insofar as the British reference, cited for its teachings alleged to relate to a ball mill that can be swivelled, and the Bishop reference, for its alleged teaching relating to a self-cleaning screen, each fails to provide the claimed features demonstrated by applicants to be lacking in the Stein et al. and Geiger references discussed relative to claim 1.

Based upon the foregoing, reconsideration of the rejection of claim 14 and its allowance are respectfully requested.

Docket No. F-8543

Ser. No. 10/525,613

Claim 2 is rejected as obvious over Stein et al. in view of Geiger, and further in view of the British patent under 35 U.S.C. §103(a). The cancellation of claim 2 renders this rejection moot.

Claims 7-13, 15, 16, 20 and 21 are rejected as obvious over either of Tsuji and Geiger, and further in view of the British patent under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection.

These same claims were also rejected as obvious over Stein et al. in view of Geiger, and further in view of the British patent under 35 U.S.C. §103(a), as addressed above. The only difference is that the teachings of Tsuji are being relied upon rather than Stein et al. With respect to claims 7-13, 15, 16 which depend from claim 1, Tsuji is similarly deficient regarding the provision essentially disk shaped rotor with a grinding material input opening arranged in a radially outer peripheral area of the grinding chamber, and a grinding material output opening arranged in a radially inner area of the grinding chamber.

Furthermore, applicants submit that Tsuji fails to teach or suggest the feature of amended claims 20 and 21 discussed above that are absent from both Geiger and the British patent. Thus, the proffered combination of references fails to teach each and every claimed element as required for establishing a prima facie case of obviousness.

Based upon the foregoing, reconsideration of the rejection of claims 7-13, 15, 16, 20 and 21 and their allowance are respectfully requested.

Docket No. F-8543

Ser. No. 10/525,613

Claim 14 is rejected as obvious over either of Tsuji and Geiger in view of the British patent, and further in view of Bishop et al. under 35 U.S.C. §103(a). The applicants herein respectfully traverse this rejection.

As noted above, claim 14 depends from claim 1 and derives patentability therefrom insofar as none of the Tsuji, Geiger, British patent and Bishop et al. references discloses the features recited therein, and as discussed above relative to claim 1 as amended.

Based upon the foregoing, reconsideration of the rejection of claim 14 and its allowance are respectfully requested.

Applicants respectfully request a one (1) month extension of time for responding to the Office Action. **The fee of \$120 for the extension is provided for in the charge authorization presented in the PTO Form 2038, Credit Card Payment form, provided herewith.**

If there is any discrepancy between the fee(s) due and the fee payment authorized in the Credit Card Payment Form PTO-2038 or the Form PTO-2038 is missing or fee payment via the Form PTO-2038 cannot be processed, the USPTO is hereby authorized to charge any fee(s) or fee(s) deficiency or credit any excess payment to Deposit Account No. 10-1250.

11/20/2007 VBUI11 00000002 10525613

01 FC:1251

120.00 0P

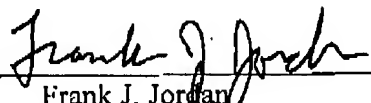
Docket No. F-8543

Ser. No. 10/525,613

In light of the foregoing, the application is now believed to be in proper form
for allowance of all claims and notice to that effect is earnestly solicited.

Respectfully submitted,

JORDAN AND HAMBURG LLP

By 
Frank J. Jordan
Reg. No. 20,456
Attorney for Applicants

Jordan and Hamburg LLP
122 East 42nd Street
New York, New York 10168
(212) 986-2340

FJJ/LW/cj
Enc: Form PTO-2038.